

3.12. Recreation

3.12.1. General Issue Statement

The Brown's Creek corridor and other natural areas within the watershed provide opportunities, which are underutilized relative to their capacity, for fishing, wildlife viewing, and outdoor learning.

3.12.2. Relevance to the District

Recreational and tourism activities are two primary ecosystem services provided by the natural environment. The Brown's Creek corridor has an appealing aesthetic and has the potential to attract more frequent fishing, birdwatching, and environmental education or eco-tourism programs. Existing trails (e.g. Gateway Trail and roadside trails) as well as the recent addition of the MNDNR Brown's Creek State trail and associated public access areas within the Brown's Creek corridor provide the necessary infrastructure to support increased outdoor recreation. As the majority of the public accesses within the corridor have been established within the last five years, the corridor and adjacent natural areas may be underutilized because of a lack of public awareness. Outdoor recreation and eco-tourism opportunities tend to increase the public's appreciation and stewardship of natural areas, which would supplement the District's existing and future efforts to protect and restore natural resources.

3.12.3. Sub-Issue Areas

Recreational Opportunities

The Brown's Creek Watershed District has a number of resources designated for recreation use that are not being utilized to the extent possible. Improving water quality and enhancing wildlife habitat will increase the recreational value of the resources for the public's use.

Stewardship

As opportunities to recreate in the BCWD increase, individuals utilizing the resources for fishing, canoeing, biking, etc. need to do so in a responsible fashion.

3.12.4. Policies, Goals, and Implementation

The policies, goals, and implementation items related to these sub-issue areas are summarized in the following tables. The sub-issue area is identified in a heading, followed by a related policy. The goals addressing that policy are lettered and stated, followed by the implementation items for that goal. This format is intended to clearly display how each policy and goal will be addressed.

Table 44. Recreation Policies, Goals, and Implementation Activities

SUB- ISSUE:		Recreational Opportunities	
POLICY: BCWD supports access to natural areas for a diversity of outdoor recreation activities.			
GOALS		IMPLEMENTATION ITEM	
A	Manage the lakes and fishery in the District to enhance the sport fishing, reduce the rough fish population, reduce the potential for aquatic vegetation to impede swimming, and benefit water quality.	1	Implement fisheries management recommendations found in Lake Management Plans
		2	Monitor public access and use of Brown’s Creek and evaluate the need to provide formal dedicated access points and the need to mitigate new impacts, i.e. erosion from foot traffic.
B	Explore opportunities to develop and leverage partnerships which increase awareness and access to natural resources recreation in BCWD	1	<i>Addressed through administration of the East Metro Water Resource Education Program (EMWREP).</i>
SUB- ISSUE:		Stewardship	
POLICY: The BCWD is committed to playing a strong leadership role in creating a culture that encourages environmental stewardship			
GOALS		IMPLEMENTATION ITEM	
A	Enhance public knowledge and appreciation for the District’s water resources through an increase in passive and active voluntary stewardship activities.	1	<i>Addressed through administration of the East Metro Water Resource Education Program (EMWREP).</i>
		2	Conduct BMP installation and implementation training workshops to provide citizens with the knowledge to install and implement BMPs on their properties. Programs could include workshops on topics such as rain barrels, rain gardens, shoreline restoration, and fertilizer use, and native vegetation buffer establishment and maintenance.
		3	Utilize the cost-share program to assist citizens in best management practice installation.

Table 45. Projected Expenditures (in 1,000’s) for Recreation Activities

Implementation Activities	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	10-Yr Total
Monitor public access and use of Brown’s Creek by walking the trail annually to evaluate the need to provide formal dedicated access points and the need to mitigate new impacts (e.g. erosion from foot traffic).	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	2.5
Total for Recreation	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	2.5

Table 46. Recreation Implementation Activities from Table 44 where implementation costs covered under another Issue Category

Implementation Activity	Issue Category where implementation cost is identified (Table #)
Implement fisheries management recommendations found in Lake Management Plans	Ecological Health (Table 30)
Conduct BMP installation and implementation training workshops to provide citizens with the knowledge to install and implement BMPs on their properties. Programs could include workshops on topics such as rain barrels, rain gardens, shoreline restoration, and fertilizer use, and native vegetation buffer establishment and maintenance.	Education and Outreach (Table 47)
Utilize the cost-share program to assist citizens in best management practice installation	Stormwater Management (Table 5)



Brown's Creek Trail – old railway line

3.13. Education, Outreach and Stewardship

3.13.1. General Issue Statement

Successful efforts to achieve the BCWD's goals will require the involvement of residents, businesses, and municipalities. These groups will be most interested in active participation in District projects, or in water and natural resource protection in general, if they understand the issues and the benefits of water resource management.

3.13.2. Relevance to the District

Since its inception as a watershed management organization, public involvement and public information efforts have played a strong role in directing project implementation in the BCWD. The BCWD has a history of citizen participation in watershed management planning and implementation. For example, the Trout Habitat Preservation Project and the Iron Enhanced Sand Filter, located in one of the District's newer residential developments, were both alternative designs compared to conventional flood alleviation projects.

3.13.3. Sub-Issue Areas

Municipality and Developer/Contractor Education and Outreach

Municipalities, as the land use authority, have great potential to impact and improve water resources. They also own and operate roads, stormwater management facilities and other stormwater infrastructure in the watershed. Additionally, municipalities are often the first point of contact for citizens, businesses, and developers interested in local water resource management. Developers and contractors, as the individuals conducting the change in land use, can directly impact and improve water resources through, among others, development planning and construction techniques. Educating municipal officials can lead to better planning, zoning and ordinances, as well as changes to operations and maintenance policies and programs. Training municipal staff allows them to more effectively install and maintain stormwater systems and BMPs, reduce impacts to water resources from other operation and maintenance activities (e.g. road and park maintenance) and more effectively interface with the development community.

Citizen-Focused Education, Outreach, and Project Assistance

Citizens make the everyday management decisions for their properties. As the largest group of constituents of the BCWD, citizens can protect and enhance water resources through increased stewardship. Citizens also act to influence the policies of the BCWD, state agencies, and municipalities.

3.13.4. Policies, Goals, and Implementation

The policies, goals, and implementation items related to these sub-issue areas are summarized in the following tables. The sub-issue area is identified in a heading, followed by a related policy. The goals addressing that policy are lettered and stated, followed by the implementation items for that goal. This format is intended to clearly display how each policy and goal will be addressed.

Table 47. Education, Outreach and Stewardship Policies, Goals, and Implementation Activities

SUB- ISSUE:		Municipality and Developer/Contractor Education and Outreach	
POLICY: The BCWD is committed to providing education and outreach services to municipalities in the District to promote good stewardship of water and natural resources.			
GOALS		IMPLEMENTATION ITEM	
A	Increase municipal official and staff capacity for and use of development techniques and regulatory strategies that protect natural resources and benefit water quality.	1	Coordinate BCWD education and outreach efforts with those of municipalities and other local watershed organizations by continuing to support the East Metro Water Resource Education Program (EMWREP).
		2	Encourage attendance at training sessions hosted by Stormwater U on ordinances, development planning strategies, and development techniques that protect natural resources and benefit water quality by providing stipends so that 2 people from each District community can attend once every three years.
		3	Promote the MPCA's tool called WMA ^t for winter maintenance professionals to promote chloride reduction activities in the Long lake subwatershed.
B	Increase municipal official and staff capacity to promote the benefits of regular maintenance of stormwater management and infiltration practices and increase the implementation of maintenance practices.	1	Encourage attendance at training sessions hosted by Stormwater U on stormwater management facility maintenance schedules and procedures and the relation to water quality improvement (e.g. best practices to reduce impacts to water resources from parks and road maintenance activities - road salt application, fertilizer use, irrigation practices) by providing stipends so that 2 people from each District community can attend once every three years.
		2	Work with municipalities in the development of operation and maintenance plans for stormwater management facilities.
C	Increase municipal official and municipal staff awareness of the BCWD and the assistance it can provide to municipalities.	1	Develop demonstration projects to highlight BMPs and stewardship.
		2	Promote Friends of the Mississippi River's Blue Star Award program to recognize municipal programs or projects and/or developer and contractor programs or projects that exemplify water and natural resource stewardship.
		3	Educate municipalities about the District's Rules.
POLICY: The BCWD promotes good stewardship of water and natural resources through education and outreach opportunities for land owners and managers conducting work within the District in order to promote good stewardship of water and natural resources.			
GOALS		IMPLEMENTATION ITEM	
A	Increase developers', contractors', homeowner's associations and property managers' awareness and use of development techniques that protect natural resources and benefit water quality.	1	Conduct workshops targeted to developers and realtors about marketing lakeshore properties based on BCWD analysis of lake functions and values.
		2	Provide training sessions on development planning strategies and development techniques that protect natural resources and benefit water quality.
B	Increase developers', contractors', homeowner's associations and property managers' awareness of the importance of construction, installation, and maintenance techniques on the long-term functionality of stormwater management practices and increase the implementation of these techniques.	1	Encourage attendance at training sessions hosted by Stormwater U on stormwater management practice construction and installation techniques and the relationship to the continued functionality of the practice by providing stipends to individuals involved in construction oversight once every three years.
		2	Encourage developers with active projects in the watershed to attend erosion control seminars held by EMWREP / MECA.
C	Increase developer, contractor, homeowner's associations and property managers' awareness of the BCWD and the assistance it can provide.	1	Educate developers and the local design community about the District's Rules.

SUB- ISSUE:		Citizen-Focused Education, Outreach, and Project Assistance	
POLICY: The BCWD will leverage and highlight existing efforts of other organizations conducting environmental stewardship work in the area			
GOALS		IMPLEMENTATION ITEM	
A	Increase citizen awareness of surface water, groundwater, and natural resource protection, restoration, and stewardship.	1	Send an annual newsletter to all citizens of the District. The newsletter may contain information on topics such as groundwater recharge, wetland and lake aesthetics and natural condition, home and yard care practices, and shoreline and wetland stewardship as well as information on BCWD accomplishments.
		2	Include an educational component in all BCWD capital improvement projects.
		3	Provide targeted educational messages through local businesses and local organizations. Businesses and organizations may include fertilizer suppliers, lawn care and garden companies, lake associations and garden clubs.
		4	Host education seminars on Estate Planning to educate the public about tax incentives to property owners who create and donate a conservation easement.
		5	Provide education to residents of the District on groundwater conservation strategies.
B	Promote citizen-led efforts in water and natural resource restoration, protection, and stewardship.	1	Continue to administer the Annual Recognition Program to recognize citizen efforts in water resource and natural resource protection.
		2	Conduct BMP installation and implementation training workshops to provide citizens with the knowledge to install and implement BMPs on their properties. Programs could include workshops on topics such as rain barrels, rain gardens, shoreline restoration, and fertilizer use, and native vegetation buffer establishment and maintenance.
		3	Utilize the cost-share program to assist citizens in best management practice installation.
		4	Develop demonstration projects to highlight stormwater management practices natural resource protection methods and resource stewardship.
POLICY: The BCWD desires to provide its citizens education and public involvement opportunities in watershed management planning and implementation in order to promote good stewardship of water and natural resources.			
GOALS		IMPLEMENTATION ITEM	
A	Increase citizen awareness of the BCWD, its role, and the functions and assistance it provides.	1	Update the District website and Facebook page to include easy-to-use information on resource protection and stewardship.
		2	Include an educational component in all BCWD capital improvement projects.
		3	Educate citizens about the District's permitting program
		4	Host annual ice cream social in different parts of the watershed to highlight local projects and to engage residents in scientific and recreational activities
B	Provide K – 12 educational opportunities to encourage stewardship and increase awareness of the interconnected nature of land, surface water, and groundwater.	1	Develop classroom educational program that provides grants to teachers planning water and natural resource education sessions for their classroom or assist with curriculum development (e.g. perform monitoring activities, monitor BMPs, design BMPs, and develop watershed educational materials for variety of audiences).
		2	Conduct classroom presentations (K-12) on watershed concepts and water and natural resource stewardship.
C	Stay informed on the topic of pollutants of emerging concern in lakes, streams, and groundwater by monitoring future studies completed by the MPCA and sharing information with the public.	1	Educate the public about pollutants of emerging concern including the widespread prevalence of pharmaceutical and cosmetic products in our lakes and streams, how these compounds can disrupt hormone regulation of aquatic organisms, such as fish, and how these chemicals enter lakes and streams.

Table 48. Projected Expenditures (in 1,000's) for Education, Outreach and Stewardship Activities

Implementation Activities	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	10-Yr Total
Coordinate BCWD education and outreach efforts with those of municipalities and other local watershed organizations by continuing to support the EMWREP.	18.5	18.5	19.4	19.4	19.4	20.4	20.4	20.4	21.4	21.4	199.3
Encourage attendance at training sessions hosted by Stormwater U on ordinances, development planning strategies, and development techniques that protect natural resources & benefit water quality by providing stipend: 2 people from District communities can attend once every 3 years.	--	--	2	--	--	2	--	--	2	--	6
Encourage attendance at training sessions hosted by Stormwater U on stormwater management facility maintenance schedules and procedures and the relation to water quality improvement by providing stipends: 2 people from District communities can attend once every three years.	--	2	--	--	2	--	--	2	--	--	6
Educate municipalities about the District's Rules.	--	--	7.5	--	--	--	--	--	--	--	7.5
Encourage attendance at training sessions hosted by Stormwater U on stormwater management practice construction and installation techniques and the relationship to the continued functionality of the practice by providing stipends to individuals involved in construction oversight once every 3 yrs.	--	--	2	--	--	2	--	--	2	--	6
Educate developers & the local design community about the District's Rules.	--	--	7.5	--	--	--	--	--	--	--	7.5
Send annual newsletter to all citizens of the District.	5	5	5	5	5	5	5	5	5	5	50
Include an educational component in all BCWD	--	6.5	--	6.5	--	6.5	--	6.5	--	6.5	32.5

Implementation Activities	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	10-Yr Total
capital improvement projects.											
Host education seminars on Estate Planning to educate the public about tax incentives to property owners who create and donate a conservation easement.	.25	--	.25	--	.25	--	.25	--	.25	--	1.25
Continue to administer the Annual Recognition Program to recognize citizen efforts in water resource and natural resource protection.	--	.25	--	.25	--	.25	--	.25	--	.25	1.25
Update the District website and Facebook page to include easy-to-use information on resource protection and stewardship	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	5
Host annual ice cream social in different parts of the watershed to highlight local projects and to engage residents in scientific and recreational activities	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	15
Develop classroom educational program	5	5	5	5	5	5	5	5	5	5	50
Conduct classroom (K-12) presentations on watershed concepts and water and natural resource stewardship.	--	--	--	--	--	1	1	1	1	1	5
Total for Education	30.75	39.25	50.7	38.2	33.7	44.1	33.6	42.1	38.7	41.2	392.3

Table 49. Education, Outreach and Stewardship Implementation Activities from Table 47 addressed by Administrative and/or Project Development Program

Work with municipalities in the development of operation and maintenance plans for stormwater management facilities.
Promote Friends of the Mississippi River’s Blue Star Award program to recognize municipal programs or projects and/or developer and contractor programs or projects that exemplify water and natural resource stewardship.
Encourage developers with active projects in the watershed to attend erosion control seminars held by EMWREP / MECA.
Educate citizens about the District’s permitting program.

Table 50. Education, Outreach and Stewardship Implementation Activities from Table 46 addressed by East Metro Water Resource Education Program

Promote the MPCA’s tool called WMA t for winter maintenance professionals to promote chloride reduction activities in the Long lake subwatershed.
Conduct workshops targeted to developers and realtors about marketing lakeshore properties based on BCWD analysis of lake functions and values.
Provide training sessions on development planning strategies and development techniques that protect natural resources and benefit water quality.
Provide targeted educational messages through local businesses and local organizations. Businesses and organizations may include fertilizer suppliers, lawn care and garden companies, lake associations and garden clubs.
Provide education to residents of the District on groundwater conservation strategies.
Conduct BMP installation and implementation training workshops to provide citizens with the knowledge to install and implement BMPs on their properties. Programs could include workshops on topics such as rain barrels, rain gardens, shoreline restoration, and fertilizer use, and native vegetation buffer establishment and maintenance.
Educate the public about pollutants of emerging concern including the widespread prevalence of pharmaceutical and cosmetic products in our lakes and streams, how these compounds can disrupt hormone regulation of aquatic organisms, such as fish, and how these chemicals enter lakes and streams.

Table 51. Education, Outreach and Stewardship Implementation Activities from Table 47 where implementation costs covered under another Issue Category

Implementation Activity	Issue Category where implementation cost is identified (Table #)
Develop demonstration projects to highlight BMPs and stewardship.	Funding (Table 54)
Utilize the cost-share program to assist citizens in best management practice installation.	Stormwater Management (Table 5)



Brown’s Creek Trail Opening